I'd also like to recognize Dr. Katie Smith. Most days she is the supervisor of the Nongame and Endangered Species program for the Indiana Department of Natural Resources, but she also happens to be the DNR's coordinator for the IWCP project. As facilitators, Rebecca and I sure appreciate the job she's done in keeping this thing moving smoothly.

Lori Kaplan in the back is a deputy director for the Indiana DNR. We're very pleased to have Lori here. We think it really shows the commitment the DNR has to wetland conservation and wetland issues. Now to the business at hand.

I'm excited about the agenda that Gwen and the wetland assessment committee have put together. I'm looking forward to seeing what comes out of it and taking it the next step toward implementing the plan as discussed in the IWCP document. To get us started, I'd like to introduce Dr. Ed Squiers from Taylor University. He is Chairman of the Environmental Science Department at Taylor, and he is currently assembling a separate project that shares with the IWCP the goal of developing a functional assessment method for Indiana. We're hoping that this seminar will not only meet our objectives for the Wetland Conservation Plan, but will also help Dr. Squiers and his associates pull together their project and see it through. Dr. Ed Squiers.

## Introduction/Objectives

## **Ed Squiers, Taylor University**

Phil is finishing his project; we're just getting started. This past year some of the same people Phil recognized–Lori, Katie, and Gwen, and also Ed Hansen, who is now retired from DNR–put together a proposal for a grant to ask some specific questions about wetland assessment. Gwen had a heavy hand in writing the proposal which we submitted to the EPA to support the DNR in putting together a scheme for analyzing and evaluating wetland priorities–particularly with regard to preservation.

Most of you are aware that the whole idea of prioritization of wetlands is difficult and important at the same time because there are so many of them, and because the many activities we're involved in at the state, local, and federal levels either disrupt wetlands directly or disrupt the watersheds that wetlands are parts of. And so we need to be able to evaluate them relatively quickly. Most of the scientific methods that we currently have are either very detailed and very narrow in scope, such that we're looking through very tiny sights, or else they're very broad, landscape-based schemes that are difficult to implement—not difficult theoretically, but actually—because a lot of the data that we need to do these kinds of things are piecemeal. It would be nice if we had data for the floodplains throughout the whole state of Indiana, but we don't. We have it for little bits and pieces of the state. So one of the things we've been charged with doing under contract through the DNR and EPA is to look at the available databases at the landscape level,

and then look at the functional assessment methods at the very detailed level, and put them together and come up with some kind of a rapid assessment scheme. It would almost be an expert system. And we'd like to ask all of you and others who have done wetlands assessment in various settings to tell us what you see when you look at a wetland.

Most of us, when we see a wetland, say: "Oh wow, this is great," or you grab your mouth, gag, and look for a place to be sick because you've seen something that is not right. That is, most of us can tell that a wetland is a great one, or it's a lousy one, or it's kind of in-between. When we do that, we're doing much the same thing that diagnosticians do in medicine, or in auto mechanics-we're hearing something, seeing something, reflecting on something that triggers our answer. We may not even have thought about what it is we're seeing. If I ask you to come up with a theoretical list, you talk about things like species diversity, but that's not what you are seeing. You talk about things like hydrology, yet you're not really seeing theoretical hydrology. What I'd like to do over the course of the next 6 to 8 months is put together a list of the things you see that make a wetland good, and the things you see that make a wetland bad. Then I'll try to interface that data with some of the specific techniques, HGM and some of the others that have been used, to come up with an assessment method that would teach people who aren't experts in wetlands to see the same things we see and to come to the same conclusions we come to. It's similar to what we expect from doctors. When a doctor diagnoses a disease, we would hope another doctor would diagnose the same disease when looking at the same symptoms. That's where we're moving. We're going to pick out 16 test sites this summer. One third of them will be identified as "good" wetlands by DNR personnel. Another third will be "bad" ones, and the rest "mediocre." Then we will look at them in detail using some of the methods that you have practiced. In the following summer we're going to pick out a larger group of wetlands and begin to see if we can find out what those criteria are that the experts are using when they react to wetlands. I like Gwen's acronym for this-it's going to be the ISWAMP project: Indiana Systematic Wetlands Assessment Methods for Prioritization. She wins the gold star for that one!

And now, to get us started, I'd like to introduce our first speaker. Brett Crump is employed by the Indiana Department of Environmental Management, working in the Section 401 Water Quality Certification Program. He has had a strong interest in wetlands and has been actively involved in the IWCP project that generated this particular symposium. Brett will talk to us a little bit about regulatory assessment needs. Brett Crump.